



RECEIVED
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TECH CENTER 1600/2900

SEQUENCE LISTING

<10> Kopin, Alan S.
Beinborn, Martin

<120> Constitutively Active, Hypersensitive,
and Nonfunctional Receptors as Novel Therapeutic Agents

<130> 00398/510002

<140> US 10/039,645

<141> 2001-10-25

<150> US 60/243,550

<151> 2000-10-26

<160> 87

<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Rattus norvegicus

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			20					25					30		
Ser	His	Val	Asp	Gly	Asn	Gln	Ser	Asp	Pro	Cys	Gly	Leu	Asn	Arg	Thr
		35				40						45			
Gly	Leu	Gly	Gly	Asn	Asp	Ser	Leu	Cys	Pro	Gln	Thr	Gly	Ser	Pro	Ser
	50				55					60					
Met	Val	Thr	Ala	Ile	Thr	Ile	Met	Ala	Leu	Tyr	Ser	Ile	Val	Cys	Val
65				70					75					80	
Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val	Met	Tyr	Val	Ile	Val	Arg	Tyr
			85					90						95	
Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn	Leu	Ala	Leu
			100				105						110		
Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser	Val	Asn	Tyr
		115					120					125			
Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr	Ile	Leu	Cys	Lys	Ile	Val	Ile
	130					135					140				
Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu	Cys	Thr
145					150				155					160	
Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys	Ala	Leu
			165					170						175	
Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Val	Asn	Val	Cys	Asn	Trp
			180				185					190			
Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro	Val	Met	Phe	Met	Ala	Thr	Thr
		195				200						205			
Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys	Thr	Leu	Thr	Phe	Ser	His	Pro
	210					215					220				
Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys	Ile	Cys	Val	Phe	Ile	Phe	Ala
225				230					235					240	
Phe	Ile	Met	Pro	Ile	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu	Met	Ile

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Asn Glu Asp Asp Ala Ser Lys Val Leu Gly Ile
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Phe Ala Ile Val Gly Asn Ile Leu Val Ile Leu
1 5 10

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Cys Ala Ile Ser Ile Asp Arg Tyr Ile Gly Val
1 5 10

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Cys Ala Ile Ser Ile Asp Arg Tyr Ile Gly Val
1 5 10

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Ala Val Asp Val Leu Cys Cys Thr Ala Ser Ile
1 5 10

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Arg Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile
1 5 10

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Glu Glu Pro Phe Tyr Ala Leu Phe Ser Ser Leu Gly
1 5 10

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Ser Arg Glu Lys Lys Ala Ala Lys Thr
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Lys Phe Ser Arg Glu Lys Lys Ala Ala Lys Thr Leu Gly Ile
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Lys Lys Val Thr Arg Thr Ile Leu Ala Ala
1 5 10

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1 5 10

<210> 18
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<400> 18

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Val	Leu	Val	Ser	Thr											
				20											

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Tyr	Asn	Ile	Met	Val	Leu	Val	Ser	Thr	Phe	Cys	Asp	Lys	Cys	Val
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Arg	Lys	Ala	Phe	Gln	Gly	Leu	Leu	Cys	Cys	Ala
1				5				10		

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Phe	Cys	Leu	Lys	Glu	His	Lys	Ala	Leu	Lys	Thr	Leu	Gly	Ile
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1				5				10						15

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Ala Pro Asp Thr Ser Ile Lys Lys Glu Thr Lys Val Leu Lys Thr
1 5 10 15

<210> 24
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<400> 24
Phe Val Cys Cys Trp Leu Pro Phe Phe Ile Leu
1 5 10

<210> 25
<211> 11
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<400> 25
Phe Met Ile Ser Leu Asp Arg Tyr Cys Ala Val
1 5 10

<210> 26
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<400> 26
Phe Met Val Leu Gly Gly Phe Thr Ser Thr Leu Tyr
1 5 10

<210> 27
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<400> 27
Gly Cys Asn Leu Glu Gly Phe Phe Ala Thr
1 5 10

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<400> 28
Met Thr Ile Pro Ala Phe Phe Ala Lys Ser Ala Ala Ile Tyr
1 5 10

<210> 29
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<400> 29
Val Val Leu Ala Ile Glu Arg Tyr Val Val Val
1 5 10

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<400> 30
Arg Met Val Ile Ile Met Val Ile Ala Phe Leu
1 5 10

<210> 31
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<400> 31
Pro Ala Phe Phe Ala Lys Ser Ala Ala Ile Tyr
1 5 10

<210> 32
<211> 11

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 Val Val Leu Ala Ile Glu Arg Tyr Val Val Val
 1 5 10

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 <400> 33
 Phe Arg Lys Leu Cys Asn Cys Lys Gln Lys
 1 5 10

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 <400> 34
 Ala Ile Ile Ser Met Asn Leu Tyr Ser Ser Ile
 1 5 10

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 <400> 35
 Leu Leu Phe Ile Ile Cys Trp Leu Pro Phe Gln Ile
 1 5 10

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 <400> 36

Ala Ser Val Ser Phe Asn Leu Tyr Ala Ser Val
1 5 10

<210> 37
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<400> 37
Leu Phe Tyr Gly Phe Leu Gly Lys Lys Phe Lys
1 5 10

<210> 38
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic fragment

<400> 38
Leu Val Ile Trp Val Ala Gly Phe Arg Met Thr His Thr Val Thr Thr
1 5 10 15
Ile Ser Tyr Leu Asn Lys Ala Val Ala
20 25

<210> 39
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<212> PRT
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<220>
<223> Synthetic fragment

<400> 39
Leu Val Val Trp Val Thr Ala Phe Glu Ala Lys Arg Thr Ile Asn Ala
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Ile Trp Phe Leu Asn Leu Ala Val Ala
20 25

<210> 40
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<212> PRT
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<400> 40
Ala Cys Ile Ser Val Asp Arg Tyr Leu Ala Ile Val His
1 5 10

<210> 41
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<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic fragment

<400> 41
Met Ala Thr Asn Lys Asp Thr Lys Ile Ala Lys Lys
1 5 10

<210> 42
<211> 11
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<220>
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<400> 42
Ile Leu Ile Phe Thr Asp Phe Thr Cys Met Ala
1 5 10

<210> 43
<211> 17
<212> PRT
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<220>
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<400> 43
Lys Ile Ala Lys Lys Met Ala Ile Leu Ile Phe Thr Asp Phe Thr Cys
1 5 10 15
Met

<210> 44
<211> 11
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<220>
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<400> 44
Ile Leu Ile Phe Thr Asp Phe Thr Cys Met Ala
1 5 10

<210> 45
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
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<400> 45
Lys Val Leu Ser Ile Asp Tyr Tyr Asn Met Phe
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<210> 46
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<400> 46
Leu Met Ser Leu Asp Arg Cys Leu Ala Ile Cys
1 5 10

<210> 47
<211> 16
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<400> 47
Glu Val Lys Arg Arg Ala Leu Trp Met Val Cys Thr Val Leu Ala Val
1 5 10 15

<210> 48
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Cys Leu Phe Phe Ile Asn Thr Tyr Cys Ser Val
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<210> 49
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<400> 49
Phe Cys Gln Glu Glu Phe Trp Gly Asn
1 5

<210> 50
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<400> 50
Phe Cys Gln Met Arg Lys Arg Arg Leu Arg Glu Gln Glu Glu Phe Trp
1 5 10 15
Gly Asn

<210> 51
<211> 14
<212> PRT
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<220>
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<400> 51
Lys Ile Leu Leu Arg Lys Phe Cys Gln Ile Arg Asp His Thr
1 5 10

<210> 52
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic fragment

<400> 52
Cys His Asp Val Leu Asn Glu Thr Leu Leu Glu Gly Tyr Tyr Ala Tyr
1 5 10 15
Tyr

<210> 53
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
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<400> 53
Tyr Tyr Asn His Ala Ile Asp Trp Gln Thr Gly
1 5 10

<210> 54
<211> 11
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<400> 54

Tyr Ala Lys Val Ser Ile Cys Leu Pro Met Asp
1 5 10

<210> 55

<211> 11

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<223> Synthetic fragment

<400> 55

Ala Ser Glu Leu Ser Val Tyr Thr Leu Thr Val
1 5 10

<210> 56

<211> 11

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<220>

<223> Synthetic fragment

<400> 56

Tyr Pro Leu Asn Ser Cys Ala Asn Pro Phe Leu
1 5 10

<210> 57

<211> 11

<212> PRT

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<220>

<223> Synthetic fragment

<400> 57

Val Ala Phe Val Ile Val Cys Cys Cys His Val
1 5 10

<210> 58

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic fragment

<400> 58

Cys Ala Asn Pro Phe Leu Tyr Ala Ile Phe Thr

1	5	10
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<210> 59
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic fragment

<400> 59
 Val Arg Asn Pro Gln Tyr Asn Pro Gly Asp Lys Asp Thr Lys Ile Ala
 1 5 10 15
 Lys

<210> 60
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic fragment

<400> 60
 Lys Asp Thr Lys Ile Ala Lys Arg Met Ala Val Leu Ile Phe Thr Asp
 1 5 10 15
 Phe Ile Cys Met
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<210> 61
 <211> 11
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<220>
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<400> 61
 Leu Ala Met Thr Leu Asp Arg His Arg Ala Ile
 1 5 10

<210> 62
 <211> 11
 <212> PRT
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<220>
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<400> 62
 Thr Arg Asn Tyr Ile His Met His Leu Phe Leu
 1 5 10

<210> 63
<211> 11
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<213> Artificial Sequence

<220>
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Lys Leu Leu Lys Ser Thr Leu Val Leu Met Pro
1 5 10

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1 5 10

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Thr Arg Asn Tyr Ile His Gly Asn Leu Phe Ala
1 5 10

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<400> 66
Arg Leu Ala Arg Ser Thr Leu Thr Leu Ile Pro
1 5 10

<210> 67
<211> 10
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<400> 67
Arg Asn Tyr Ile His Met His Leu Phe Ile
1 5 10

<210> 68
<211> 10
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<220>
<223> Synthetic fragment

<400> 68
Leu Ala Arg Ser Thr Leu Leu Leu Ile Pro
1 5 10

<210> 69
<211> 25
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<220>
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<400> 69
Thr Leu Ser Phe Val Ala Gln Asn Lys Ile Asp Ser Leu Asn Leu Asp
1 5 10 15
Glu Phe Cys Asn Cys Ser Glu His Ile
20 25

<210> 70
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<400> 70
Pro Leu Ser Ala Tyr Gln Ile Tyr Leu Gly Thr
1 5 10

<210> 71
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<400> 71
Gln Ser Leu Leu Val Pro Ser Ile Ile Phe Ile
1 5 10

<210> 72
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<400> 72
Met Ser Phe Val Leu Val Val Lys Leu Ile Leu Ala Ile Arg
1 5 10

<210> 73
<211> 15
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<220>
<223> Synthetic fragment

<400> 73
Asp Ser Phe His Ile Leu Leu Ile Met Ser Cys Gln Ser Leu Leu
1 5 10 15

<210> 74
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<220>
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<400> 74
Asp Val Arg Asp Ile Leu His Cys Thr Asn Ser
1 5 10

<210> 75
<211> 16
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<213> Artificial Sequence

<220>
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<400> 75
Leu Ile Met Ser Cys Gln Ser Leu Leu Val Pro Ser Ile Ile Phe Ile
1 5 10 15

<210> 76
<211> 376
<212> PRT
<213> Homo sapiens

<400> 76
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Pro Ser Asn Gly Ser Ala Gly Ser Glu Asp Ala Gln Leu Glu Pro Ala			
35	40	45	
His Ile Ser Pro Ala Asp Pro Val Glu Ile Thr Ala Val Tyr Ser Val			
50	55	60	
Val Phe Val Val Gly Leu Val Gly Asn Ser Leu Val Met Phe Val Ile			
65	70	75	80
Ile Arg Tyr Thr Lys Met Lys Thr Ala Thr Asn Ile Tyr Ile Phe Asn			
85	90	95	
Leu Ala Leu Ala Asp Ala Leu Val Thr Thr Thr Met Pro Phe Gln Ser			
100	105	110	
Thr Val Tyr Leu Met Asn Ser Trp Pro Phe Gly Asp Val Leu Cys Lys			
115	120	125	
Ile Val Ile Ser Ile Asp Tyr Asn Met Phe Thr Ser Ile Phe Thr			
130	135	140	
Leu Thr Met Met Ser Val Asp Arg Tyr Ile Ala Val Cys His Pro Val			
145	150	155	160
Lys Ala Leu Asp Phe Arg Thr Pro Leu Lys Ala Lys Ile Ile Asn Ile			
165	170	175	
Cys Ile Trp Leu Leu Ser Ser Ser Val Gly Ile Ser Ala Ile Val Leu			
180	185	190	
Gly Gly Thr Lys Val Arg Glu Asp Val Asp Val Ile Glu Cys Ser Leu			
195	200	205	
Gln Phe Pro Asp Asp Asp Tyr Ser Trp Trp Asp Leu Phe Met Lys Ile			
210	215	220	
Cys Val Phe Ile Phe Ala Phe Val Ile Pro Val Leu Ile Ile Ile Val			
225	230	235	240
Cys Tyr Thr Leu Met Ile Leu Arg Leu Lys Ser Val Arg Leu Leu Ser			
245	250	255	
Gly Ser Arg Glu Lys Asp Arg Asn Leu Arg Arg Ile Thr Arg Leu Val			
260	265	270	
Leu Val Val Val Ala Val Phe Val Val Cys Trp Thr Pro Ile His Ile			
275	280	285	
Phe Ile Leu Val Glu Ala Leu Gly Ser Thr Ser His Ser Thr Ala Ala			
290	295	300	
Leu Ser Ser Tyr Tyr Phe Cys Ile Ala Leu Gly Tyr Thr Asn Ser Ser			
305	310	315	320
Leu Asn Pro Ile Leu Tyr Ala Phe Leu Asp Glu Asn Phe Lys Arg Cys			
325	330	335	
Phe Arg Asp Phe Cys Phe Pro Leu Lys Met Arg Met Glu Arg Gln Ser			
340	345	350	
Thr Ser Arg Val Arg Asn Thr Val Gln Asp Pro Ala Tyr Leu Arg Asp			
355	360	365	
Ile Asp Gly Met Asn Lys Pro Val			
370	375		

<210> 77
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 <213> Rattus norvegicus

<400> 77
 Met Glu Ser Pro Ile Gln Ile Phe Arg Gly Glu Pro Gly Pro Thr Cys
 1 5 10 15
 Ala Pro Ser Ala Cys Leu Leu Pro Asn Ser Ser Ser Trp Phe Pro Asn
 20 25 30

Trp	Ala	Glu	Ser	Asp	Ser	Asn	Gly	Ser	Val	Gly	Ser	Glu	Asp	Gln	Gln
	35						40					45			
Leu	Glu	Pro	Ala	His	Ile	Ser	Pro	Ala	Ile	Pro	Val	Ile	Ile	Thr	Ala
	50					55					60				
Val	Tyr	Ser	Val	Val	Phe	Val	Val	Gly	Leu	Val	Gly	Asn	Ser	Leu	Val
65					70					75				80	
Met	Phe	Val	Ile	Ile	Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile
				85					90					95	
Tyr	Ile	Phe	Asn	Leu	Ala	Leu	Ala	Asp	Ala	Leu	Val	Thr	Thr	Thr	Met
			100					105						110	
Pro	Phe	Gln	Ser	Ala	Val	Tyr	Leu	Met	Asn	Ser	Trp	Pro	Phe	Gly	Asp
		115					120					125			
Val	Leu	Cys	Lys	Ile	Val	Ile	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr
	130					135					140				
Ser	Ile	Phe	Thr	Leu	Thr	Met	Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val
145					150					155					160
Cys	His	Pro	Val	Lys	Ala	Leu	Asp	Phe	Arg	Thr	Pro	Leu	Lys	Ala	Lys
				165					170					175	
Ile	Ile	Asn	Ile	Cys	Ile	Trp	Ile	Leu	Ala	Ser	Ser	Val	Gly	Ile	Ser
		180						185					190		
Ala	Ile	Val	Leu	Gly	Gly	Thr	Lys	Val	Arg	Glu	Asp	Val	Asp	Val	Ile
		195					200					205			
Glu	Cys	Ser	Leu	Gln	Phe	Pro	Asp	Asp	Glu	Tyr	Ser	Trp	Trp	Asp	Leu
	210					215					220				
Phe	Met	Lys	Ile	Cys	Val	Phe	Val	Phe	Ala	Phe	Val	Ile	Pro	Val	Leu
225					230					235					240
Ile	Ile	Ile	Val	Cys	Tyr	Thr	Leu	Met	Ile	Leu	Arg	Leu	Lys	Ser	Val
				245					250					255	
Arg	Leu	Leu	Ser	Gly	Ser	Arg	Glu	Lys	Asp	Arg	Asn	Leu	Arg	Arg	Ile
		260						265					270		
Thr	Lys	Ile	Val	Leu	Val	Val	Val	Ala	Val	Phe	Ile	Ile	Cys	Trp	Thr
	275						280					285			
Pro	Ile	His	Ile	Phe	Ile	Leu	Val	Glu	Ala	Leu	Gly	Ser	Thr	Ser	His
	290					295					300				
Ser	Thr	Ala	Val	Leu	Ser	Ser	Tyr	Tyr	Phe	Cys	Ile	Ala	Leu	Gly	Tyr
305					310					315					320
Thr	Asn	Ser	Ser	Leu	Asn	Pro	Val	Leu	Tyr	Ala	Phe	Leu	Asp	Glu	Asn
				325					330					335	
Phe	Lys	Arg	Cys	Phe	Arg	Asp	Phe	Cys	Phe	Pro	Ile	Lys	Met	Arg	Met
			340					345					350		
Glu	Arg	Gln	Ser	Thr	Asn	Arg	Val	Arg	Asn	Thr	Val	Gln	Asp	Pro	Ala
		355					360					365			
Ser	Met	Arg	Asp	Val	Gly	Gly	Met	Asn	Lys	Pro	Val				
	370					375					380				

<210> 78
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 78
 Met Asp Ser Ser Ala Ala Pro Thr Asn Ala Ser Asn Cys Thr Asp Ala
 1 5 10 15
 Leu Ala Tyr Ser Ser Cys Ser Pro Ala Pro Ser Pro Gly Ser Trp Val
 20 25 30
 Asn Leu Ser His Leu Asp Gly Asn Leu Ser Asp Pro Cys Gly Pro Asn
 35 40 45
 Arg Thr Asp Leu Gly Gly Arg Asp Ser Leu Cys Pro Pro Thr Gly Ser

50	55	60													
Pro	Ser	Met	Ile	Thr	Ala	Ile	Thr	Ile	Met	Ala	Leu	Tyr	Ser	Ile	Val
65					70					75					80
Cys	Val	Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val	Met	Tyr	Val	Ile	Val
			85						90					95	
Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn	Leu
			100					105					110		
Ala	Leu	Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser	Val
		115					120					125			
Asn	Tyr	Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr	Ile	Leu	Cys	Lys	Ile
	130					135					140				
Val	Ile	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu
145				150					155						160
Cys	Thr	Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys
				165					170						175
Ala	Leu	Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Ile	Asn	Val	Cys
		180						185					190		
Asn	Trp	Ile	Leu	Ser	Ser	Ala	Ile	Gly	Ile	Pro	Val	Met	Phe	Met	Ala
	195						200					205			
Thr	Thr	Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys	Thr	Leu	Thr	Phe	Ser
	210					215					220				
His	Pro	Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Asp	Lys	Ile	Cys	Val	Phe	Ile
225					230					235					240
Phe	Ala	Phe	Ile	Met	Pro	Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu
			245						250					255	
Met	Ile	Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu	Ser	Gly	Ser	Lys	Glu
		260						265					270		
Lys	Asp	Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Val
	275						280					285			
Ala	Val	Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His	Ile	Tyr	Val	Ile	Ile
	290					295					300				
Lys	Ala	Leu	Val	Thr	Ile	Pro	Glu	Thr	Thr	Phe	Gln	Thr	Val	Ser	Trp
305					310					315					320
His	Phe	Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn	Pro	Val
			325						330					335	
Leu	Tyr	Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu	Phe
		340						345					350		
Cys	Ile	Pro	Thr	Ser	Ser	Asn	Ile	Glu	Gln	Gln	Asn	Ser	Thr	Arg	Ile
	355					360					365				
Arg	Gln	Asn	Thr	Arg	Asp	His	Pro	Ser	Thr	Ala	Asn	Thr	Val	Asp	Arg
	370					375					380				
Thr	Asn	His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu	Thr	Ala	Pro	Leu	Pro
385				390						395					400

<210> 79
 <211> 398
 <212> PRT
 <213> Rattus norvegicus

<400> 79
 Met Asp Ser Ser Thr Gly Pro Gly Asn Thr Ser Asp Cys Ser Asp Pro
 1 5 10 15
 Leu Ala Gln Ala Ser Cys Ser Pro Ala Pro Gly Ser Trp Leu Asn Leu
 20 25 30
 Ser His Val Asp Gly Asn Gln Ser Asp Pro Cys Gly Leu Asn Arg Thr
 35 40 45
 Gly Leu Gly Gly Asn Asp Ser Leu Cys Pro Gln Thr Gly Ser Pro Ser
 50 55 60

Met	Val	Thr	Ala	Ile	Thr	Ile	Met	Ala	Leu	Tyr	Ser	Ile	Val	Cys	Val
65					70					75					80
Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val	Met	Tyr	Val	Ile	Val	Arg	Tyr
			85						90					95	
Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn	Leu	Ala	Leu
			100					105					110		
Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser	Val	Asn	Tyr
			115				120					125			
Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr	Ile	Leu	Cys	Lys	Ile	Val	Ile
	130					135					140				
Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu	Cys	Thr
145					150					155					160
Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys	Ala	Leu
				165					170					175	
Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Val	Asn	Val	Cys	Asn	Trp
			180					185					190		
Ile	Leu	Ser	Ser	Ala	Ile	Gly	Ile	Pro	Val	Met	Phe	Met	Ala	Thr	Thr
		195					200					205			
Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys	Thr	Leu	Thr	Phe	Ser	His	Pro
	210					215					220				
Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys	Ile	Cys	Val	Phe	Ile	Phe	Ala
225					230					235					240
Phe	Ile	Met	Pro	Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu	Met	Ile
				245					250					255	
Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu	Ser	Gly	Ser	Lys	Glu	Lys	Asp
			260					265					270		
Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Val	Ala	Val
		275					280					285			
Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His	Ile	Tyr	Val	Ile	Ile	Lys	Ala
	290					295					300				
Leu	Ile	Thr	Ile	Pro	Glu	Thr	Thr	Phe	Gln	Thr	Val	Ser	Trp	His	Phe
305					310					315					320
Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn	Pro	Val	Leu	Tyr
				325					330					335	
Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu	Phe	Cys	Ile
			340				345						350		
Pro	Thr	Ser	Ser	Thr	Ile	Glu	Gln	Gln	Asn	Ser	Thr	Arg	Val	Arg	Gln
		355					360					365			
Asn	Thr	Arg	Glu	His	Pro	Ser	Thr	Ala	Asn	Thr	Val	Asp	Arg	Thr	Asn
	370					375					380				
His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu	Thr	Ala	Pro	Leu	Pro		
385					390					395					

<210> 80
 <211> 372
 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Glu Pro Ala Pro Ser Ala Gly Ala Glu Leu Gln Pro Pro Leu Phe
 1 5 10 15
 Ala Asn Ala Ser Asp Ala Tyr Pro Ser Ala Cys Pro Ser Ala Gly Ala
 20 25 30
 Asn Ala Ser Gly Pro Pro Gly Ala Arg Ser Ala Ser Ser Leu Ala Leu
 35 40 45
 Ala Ile Ala Ile Thr Ala Leu Tyr Ser Ala Val Cys Ala Val Gly Leu
 50 55 60
 Leu Gly Asn Val Leu Val Met Phe Gly Ile Val Arg Tyr Thr Lys Met

65					70				75				80		
Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn	Leu	Ala	Leu	Ala	Asp	Ala
				85					90					95	
Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser	Ala	Lys	Tyr	Leu	Met	Glu
			100					105					110		
Thr	Trp	Pro	Phe	Gly	Glu	Leu	Leu	Cys	Lys	Ala	Val	Ile	Ser	Ile	Asp
		115					120					125			
Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu	Thr	Met	Met	Ser	Val
	130					135					140				
Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys	Ala	Leu	Asp	Phe	Arg
145					150					155					160
Thr	Pro	Ala	Lys	Ala	Lys	Ile	Ile	Asn	Ile	Cys	Ile	Trp	Val	Leu	Ala
			165					170						175	
Ser	Gly	Val	Gly	Val	Pro	Ile	Met	Val	Met	Ala	Val	Thr	Arg	Pro	Arg
		180					185						190		
Asp	Gly	Ala	Val	Val	Cys	Met	Leu	Gln	Phe	Pro	Ser	Pro	Ser	Trp	Tyr
	195					200						205			
Trp	Asp	Thr	Val	Thr	Lys	Ile	Cys	Val	Phe	Leu	Phe	Ala	Phe	Val	Val
	210					215					220				
Pro	Ile	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu	Met	Leu	Leu	Arg	Leu
225					230					235					240
Arg	Ser	Val	Arg	Leu	Leu	Ser	Gly	Ser	Lys	Glu	Lys	Asp	Arg	Ser	Leu
			245					250						255	
Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Val	Gly	Ala	Phe	Val	Val
		260					265						270		
Cys	Trp	Ala	Pro	Ile	His	Ile	Phe	Val	Ile	Val	Trp	Thr	Leu	Val	Asp
	275					280					285				
Ile	Asp	Arg	Arg	Asp	Pro	Leu	Val	Val	Ala	Ala	Leu	His	Leu	Cys	Ile
	290				295						300				
Ala	Leu	Gly	Tyr	Ala	Asn	Ser	Ser	Leu	Asn	Pro	Val	Leu	Tyr	Ala	Phe
305					310					315					320
Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Gln	Leu	Cys	Arg	Lys	Pro
			325					330						335	
Cys	Gly	Arg	Pro	Asp	Pro	Ser	Ser	Phe	Ser	Arg	Ala	Arg	Glu	Ala	Thr
		340					345					350			
Ala	Arg	Glu	Arg	Val	Thr	Ala	Cys	Thr	Pro	Ser	Asp	Gly	Pro	Gly	Gly
	355					360						365			
Gly	Ala	Ala	Ala												
	370														

<210> 81
 <211> 359
 <212> PRT
 <213> Rattus norvegicus

<400> 81
 Met Ala Leu Asn Ser Ser Ala Glu Asp Gly Ile Lys Arg Ile Gln Asp
 1 5 10 15
 Asp Cys Pro Lys Ala Gly Arg His Ser Tyr Ile Phe Val Met Ile Pro
 20 25 30
 Thr Leu Tyr Ser Ile Ile Phe Val Val Gly Ile Phe Gly Asn Ser Leu
 35 40 45
 Val Val Ile Val Ile Tyr Phe Tyr Met Lys Leu Lys Thr Val Ala Ser
 50 55 60
 Val Phe Leu Leu Asn Leu Ala Leu Ala Asp Leu Cys Phe Leu Leu Thr
 65 70 75 80
 Leu Pro Leu Trp Ala Val Tyr Thr Ala Met Glu Tyr Arg Trp Pro Phe
 85 90 95

Gly	Asn	His	Leu	Cys	Lys	Ile	Ala	Ser	Ala	Ser	Val	Thr	Glu	Asn	Leu
			100					105					110		
Tyr	Ala	Ser	Val	Phe	Leu	Leu	Thr	Cys	Leu	Ser	Ile	Asp	Arg	Tyr	Leu
		115					120					125			
Ala	Ile	Val	His	Pro	Met	Lys	Ser	Arg	Leu	Arg	Arg	Thr	Met	Leu	Val
		130				135					140				
Ala	Lys	Val	Thr	Cys	Ile	Ile	Trp	Leu	Met	Ala	Gly	Leu	Ala	Ser	
145					150				155					160	
Leu	Pro	Ala	Val	Ile	His	Arg	Asn	Val	Tyr	Phe	Ile	Glu	Asn	Thr	Asn
			165					170						175	
Ile	Thr	Val	Cys	Ala	Phe	His	Tyr	Glu	Ser	Arg	Asn	Ser	Thr	Leu	Pro
		180						185					190		
Ile	Gly	Leu	Gly	Leu	Thr	Lys	Asn	Ile	Leu	Gly	Phe	Leu	Phe	Pro	Phe
		195					200					205			
Leu	Ile	Ile	Ile	Thr	Ser	Tyr	Thr	Leu	Ile	Trp	Lys	Ala	Leu	Lys	Lys
		210				215					220				
Ala	Tyr	Glu	Ile	Gln	Lys	Asn	Lys	Pro	Arg	Asn	Asp	Asp	Ile	Phe	Arg
225					230					235					240
Ile	Ile	Met	Ala	Ile	Val	Leu	Phe	Phe	Phe	Phe	Ser	Trp	Val	Pro	His
			245					250						255	
Gln	Ile	Phe	Thr	Phe	Leu	Asp	Val	Leu	Ile	Gln	Leu	Gly	Val	Ile	His
			260					265					270		
Asp	Cys	Lys	Ile	Ser	Asp	Ile	Val	Asp	Thr	Ala	Met	Pro	Ile	Thr	Ile
		275					280					285			
Cys	Ile	Ala	Tyr	Phe	Asn	Asn	Cys	Leu	Asn	Pro	Leu	Phe	Tyr	Gly	Phe
		290				295					300				
Leu	Gly	Lys	Lys	Phe	Lys	Lys	Tyr	Phe	Leu	Gln	Leu	Leu	Lys	Tyr	Ile
305					310					315					320
Pro	Pro	Lys	Ala	Lys	Ser	His	Ser	Ser	Leu	Ser	Thr	Lys	Met	Ser	Thr
			325						330					335	
Leu	Ser	Tyr	Arg	Pro	Ser	Asp	Asn	Met	Ser	Ser	Ser	Ala	Lys	Lys	Pro
		340						345					350		
Ala	Ser	Cys	Phe	Glu	Val	Glu									
		355													

<210> 82
 <211> 391
 <212> PRT
 <213> Homo sapiens

<400>	82														
Met	Phe	Ser	Pro	Trp	Lys	Ile	Ser	Met	Phe	Leu	Ser	Val	Arg	Glu	Asp
1				5					10					15	
Ser	Val	Pro	Thr	Thr	Ala	Ser	Phe	Ser	Ala	Asp	Met	Leu	Asn	Val	Thr
			20					25					30		
Leu	Gln	Gly	Pro	Thr	Leu	Asn	Gly	Thr	Phe	Ala	Gln	Ser	Lys	Cys	Pro
		35					40					45			
Gln	Val	Glu	Trp	Leu	Gly	Trp	Leu	Asn	Thr	Ile	Gln	Pro	Pro	Phe	Leu
	50					55					60				
Trp	Val	Ile	Phe	Val	Leu	Ala	Thr	Leu	Glu	Asn	Ile	Phe	Val	Leu	Ser
65					70					75					80
Val	Phe	Cys	Leu	His	Lys	Ser	Ser	Cys	Thr	Val	Ala	Glu	Ile	Tyr	Leu
			85						90					95	
Gly	Asn	Leu	Ala	Ala	Ala	Asp	Leu	Ile	Leu	Ala	Cys	Gly	Leu	Pro	Phe
		100						105					110		
Trp	Ala	Ile	Thr	Ile	Ser	Asn	Asn	Phe	Asp	Trp	Leu	Phe	Gly	Glu	Thr
		115				120						125			
Leu	Cys	Arg	Val	Val	Asn	Ala	Ile	Ile	Ser	Met	Asn	Leu	Tyr	Ser	Ser

130		135		140
Ile Cys Phe Leu Met	Leu Val Ser Ile Asp Arg Tyr Leu Ala Leu Val			
145		150		160
Lys Thr Met Ser Met	Gly Arg Met Arg Gly Val Arg Trp Ala Lys Leu			
	165		170	175
Tyr Ser Leu Val Ile	Trp Gly Cys Thr Leu Leu Leu Ser Ser Pro Met			
	180		185	190
Leu Val Phe Arg Thr	Met Lys Glu Tyr Ser Asp Glu Gly His Asn Val			
	195		200	205
Thr Ala Cys Val Ile	Ser Tyr Pro Ser Leu Ile Trp Glu Val Phe Thr			
	210		215	220
Asn Met Leu Leu Asn	Val Val Gly Phe Leu Leu Pro Leu Ser Val Ile			
225		230		240
Thr Phe Cys Thr Met	Gln Ile Met Gln Val Leu Arg Asn Asn Glu Met			
	245		250	255
Gln Lys Phe Lys Glu	Ile Gln Thr Glu Arg Arg Ala Thr Val Leu Val			
	260		265	270
Leu Val Val Leu Leu	Leu Phe Ile Ile Cys Trp Leu Pro Phe Gln Ile			
	275		280	285
Ser Thr Phe Leu Asp	Thr Leu His Arg Leu Gly Ile Leu Ser Ser Cys			
	290		295	300
Gln Asp Glu Arg Ile	Ile Asp Val Ile Thr Gln Ile Ala Ser Phe Met			
305		310		320
Ala Tyr Ser Asn Ser	Cys Leu Asn Pro Leu Val Tyr Val Ile Val Gly			
	325		330	335
Lys Arg Phe Arg Lys	Lys Ser Trp Glu Val Tyr Gln Gly Val Cys Gln			
	340		345	350
Lys Gly Gly Cys Arg	Ser Glu Pro Ile Gln Met Glu Asn Ser Met Gly			
	355		360	365
Thr Leu Arg Thr Ser	Ile Ser Val Glu Arg Gln Ile His Lys Leu Gln			
	370		375	380
Asp Trp Ala Gly Ser	Arg Gln			
385		390		

<210> 83
 <211> 398
 <212> PRT
 <213> Mus musculus

<400> 83
 Met Asp Ser Ser Ala Gly Pro Gly Asn Ile Ser Asp Cys Ser Asp Pro
 1 5 10 15
 Leu Ala Pro Ala Ser Cys Ser Pro Ala Pro Gly Ser Trp Leu Asn Leu
 20 25 30
 Ser His Val Asp Gly Asn Gln Ser Asp Pro Cys Gly Pro Asn Arg Thr
 35 40 45
 Gly Leu Gly Gly Ser His Ser Leu Cys Pro Gln Thr Gly Ser Pro Ser
 50 55 60
 Met Val Thr Ala Ile Thr Ile Met Ala Leu Tyr Ser Ile Val Cys Val
 65 70 75 80
 Val Gly Leu Phe Gly Asn Phe Leu Val Met Tyr Val Ile Val Arg Tyr
 85 90 95
 Thr Lys Met Lys Thr Ala Thr Asn Ile Tyr Ile Phe Asn Leu Ala Leu
 100 105 110
 Ala Asp Ala Leu Ala Thr Ser Thr Leu Pro Phe Gln Ser Val Asn Tyr
 115 120 125
 Leu Met Gly Thr Trp Pro Phe Gly Asn Ile Leu Cys Lys Ile Val Ile
 130 135 140

Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu	Cys	Thr
145					150					155					160
Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys	Ala	Leu
			165						170					175	
Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Val	Asn	Val	Cys	Asn	Trp
			180					185					190		
Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro	Val	Met	Phe	Met	Ala	Thr	Thr
		195					200					205			
Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys	Thr	Leu	Thr	Phe	Ser	His	Pro
	210					215					220				
Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys	Ile	Cys	Val	Phe	Ile	Phe	Ala
225					230					235					240
Phe	Ile	Met	Pro	Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu	Met	Ile
				245					250					255	
Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu	Ser	Gly	Ser	Lys	Glu	Lys	Asp
			260				265						270		
Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Val	Ala	Val
		275					280					285			
Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His	Ile	Tyr	Val	Ile	Ile	Lys	Ala
	290					295					300				
Leu	Ile	Thr	Ile	Pro	Glu	Thr	Thr	Phe	Gln	Thr	Val	Ser	Trp	His	Phe
305					310					315					320
Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn	Pro	Val	Leu	Tyr
				325					330					335	
Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu	Phe	Cys	Ile
			340				345						350		
Pro	Thr	Ser	Ser	Thr	Ile	Glu	Gln	Gln	Asn	Ser	Ala	Arg	Ile	Arg	Gln
		355				360						365			
Asn	Thr	Arg	Glu	His	Pro	Ser	Thr	Ala	Asn	Thr	Val	Asp	Arg	Thr	Asn
	370					375					380				
His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu	Thr	Ala	Pro	Leu	Pro		
385					390					395					

<210> 84
 <211> 405
 <212> PRT
 <213> Bos taurus

<400> 84

Met	Asp	Ser	Gly	Ala	Val	Pro	Thr	Asn	Ala	Ser	Asn	Cys	Ile	Asp	Pro
1				5					10					15	
Phe	Thr	His	Pro	Ser	Ser	Cys	Ser	Pro	Ala	Pro	Ser	Pro	Ser	Ser	Trp
			20					25					30		
Val	Asn	Phe	Ser	His	Leu	Glu	Gly	Asn	Leu	Ser	Asp	Pro	Cys	Gly	Pro
		35					40					45			
Asn	Arg	Thr	Glu	Leu	Gly	Gly	Ser	Asp	Arg	Leu	Cys	Pro	Ser	Ala	Gly
	50				55						60				
Ser	Pro	Ser	Met	Ile	Thr	Ala	Met	Val	Thr	Ala	Ile	Ile	Ile	Met	Ala
65					70					75					80
Leu	Tyr	Ser	Ile	Val	Cys	Val	Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val
				85					90					95	
Met	Tyr	Val	Ile	Val	Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile
			100					105					110		
Tyr	Ile	Phe	Asn	Leu	Ala	Leu	Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu
		115				120						125			
Pro	Phe	Gln	Ser	Val	Asn	Tyr	Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr
	130					135					140				
Ile	Leu	Cys	Lys	Ile	Val	Ile	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr

145	Ser	Ile	Phe	Thr	Leu	Cys	Thr	Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val
					165					170					175	
	Cys	His	Pro	Val	Lys	Ala	Leu	Asp	Leu	Arg	Thr	Pro	Arg	Asn	Ala	Lys
				180					185					190		
	Ile	Ile	Asn	Ile	Cys	Asn	Trp	Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro
			195					200					205			
	Val	Met	Phe	Met	Ala	Thr	Thr	Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys
		210					215					220				
	Thr	Leu	Thr	Phe	Ser	His	Pro	Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys
225					230						235					240
	Ile	Cys	Val	Phe	Ile	Phe	Ala	Phe	Ile	Met	Pro	Ile	Leu	Ile	Ile	Thr
				245					250						255	
	Val	Cys	Tyr	Gly	Leu	Met	Ile	Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu
			260					265					270			
	Ser	Gly	Ser	Lys	Glu	Lys	Asp	Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met
		275					280						285			
	Val	Leu	Val	Val	Val	Ala	Val	Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His
		290			295						300					
	Ile	Tyr	Val	Ile	Ile	Lys	Ala	Leu	Ile	Thr	Ile	Pro	Glu	Thr	Thr	Phe
305					310						315					320
	Gln	Thr	Val	Ser	Trp	His	Phe	Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser
				325					330						335	
	Cys	Leu	Asn	Pro	Val	Leu	Tyr	Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg
			340					345					350			
	Cys	Phe	Arg	Glu	Phe	Cys	Ile	Pro	Thr	Ser	Ser	Thr	Ile	Glu	Gln	Gln
		355				360						365				
	Asn	Ser	Thr	Arg	Ile	Arg	Gln	Asn	Thr	Arg	Asp	His	Pro	Ser	Thr	Ala
		370			375						380					
	Asn	Thr	Val	Asp	Arg	Thr	Asn	His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu
385					390					395					400	
	Thr	Thr	Pro	Leu	Pro											
				405												

<210> 85
 <211> 400.
 <212> PRT
 <213> Homo sapiens

<400> 85

Met	Asp	Ser	Ser	Ala	Ala	Pro	Thr	Asn	Ala	Ser	Asn	Cys	Thr	Asp	Ala
1				5					10					15	
Leu	Ala	Tyr	Ser	Ser	Cys	Ser	Pro	Ala	Pro	Ser	Pro	Gly	Ser	Trp	Val
			20				25					30			
Asn	Leu	Ser	His	Leu	Asp	Gly	Asn	Leu	Ser	Asp	Pro	Cys	Gly	Pro	Asn
		35				40					45				
Arg	Thr	Asp	Leu	Gly	Gly	Arg	Asp	Ser	Leu	Cys	Pro	Pro	Thr	Gly	Ser
	50				55					60					
Pro	Ser	Met	Ile	Thr	Ala	Ile	Thr	Ile	Met	Ala	Leu	Tyr	Ser	Ile	Val
65				70					75					80	
Cys	Val	Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val	Met	Tyr	Val	Ile	Val
			85				90						95		
Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn	Leu
			100				105					110			
Ala	Leu	Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser	Val
		115				120					125				
Asn	Tyr	Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr	Ile	Leu	Cys	Lys	Ile
	130				135					140					

Val	Ile	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr	Leu
145					150					155					160
Cys	Thr	Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro	Val	Lys
				165					170					175	
Ala	Leu	Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Ile	Asn	Val	Cys
			180					185					190		
Asn	Trp	Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro	Val	Met	Phe	Met	Ala
		195					200					205			
Thr	Thr	Lys	Tyr	Arg	Gln	Gly	Ser	Ile	Asp	Cys	Thr	Leu	Thr	Phe	Ser
	210					215					220				
His	Pro	Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys	Ile	Cys	Val	Phe	Ile
225					230					235					240
Phe	Ala	Phe	Ile	Met	Pro	Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu
				245					250					255	
Met	Ile	Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu	Ser	Gly	Ser	Lys	Glu
			260					265					270		
Lys	Asp	Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Val
		275					280					285			
Ala	Val	Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His	Ile	Tyr	Val	Ile	Ile
	290					295					300				
Lys	Ala	Leu	Val	Thr	Ile	Pro	Glu	Thr	Thr	Phe	Gln	Thr	Val	Ser	Trp
305					310					315					320
His	Phe	Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn	Pro	Val
				325					330					335	
Leu	Tyr	Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu	Phe
			340					345					350		
Cys	Ile	Pro	Thr	Ser	Ser	Asn	Ile	Glu	Gln	Gln	Asn	Ser	Thr	Arg	Ile
		355				360						365			
Arg	Gln	Asn	Thr	Arg	Asp	His	Pro	Ser	Thr	Ala	Asn	Thr	Val	Asp	Arg
	370					375					380				
Thr	Asn	His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu	Thr	Ala	Pro	Leu	Pro
385					390					395					400

<210> 86
 <211> 400
 <212> PRT
 <213> Sus scrofa

<400> 86

Met	Asp	Ser	Ser	Ala	Asp	Pro	Arg	Asn	Ala	Ser	Asn	Cys	Thr	Asp	Pro
1				5					10					15	
Phe	Ser	Pro	Ser	Ser	Met	Cys	Ser	Pro	Val	Pro	Ser	Pro	Ser	Ser	Trp
			20					25					30		
Val	Asn	Phe	Ser	His	Leu	Glu	Gly	Asn	Leu	Ser	Asp	Pro	Cys	Ile	Arg
		35					40					45			
Asn	Arg	Thr	Glu	Leu	Gly	Gly	Ser	Asp	Ser	Leu	Cys	Pro	Pro	Thr	Gly
	50				55						60				
Ser	Pro	Ser	Met	Val	Thr	Ala	Ile	Thr	Ile	Met	Ala	Leu	Tyr	Ser	Ile
65					70					75					80
Val	Cys	Val	Val	Gly	Leu	Phe	Gly	Asn	Phe	Leu	Val	Met	Tyr	Val	Ile
			85					90						95	
Val	Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile	Phe	Asn
			100					105					110		
Leu	Ala	Leu	Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe	Gln	Ser
		115					120					125			
Val	Asn	Tyr	Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Thr	Ile	Leu	Cys	Lys
	130					135					140				
Ile	Val	Ile	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile	Phe	Thr

145					150					155				160
Leu	Cys	Thr	Met	Ser	Val	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His	Pro
				165					170					175
Lys	Ala	Leu	Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Ile	Asn
			180					185					190	
Cys	Asn	Trp	Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro	Val	Met	Phe
		195					200				205			
Ala	Thr	Thr	Lys	Tyr	Arg	Asn	Gly	Ser	Ile	Asp	Cys	Ala	Leu	Thr
	210					215				220				
Ser	His	Pro	Thr	Trp	Tyr	Trp	Glu	Asn	Leu	Leu	Lys	Ile	Cys	Val
225				230					235					240
Ile	Phe	Ala	Phe	Ile	Met	Pro	Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr
			245					250					255	
Leu	Met	Ile	Leu	Arg	Leu	Lys	Ser	Val	Arg	Met	Leu	Ser	Gly	Ser
		260					265					270		
Glu	Lys	Asp	Arg	Asn	Leu	Arg	Arg	Ile	Thr	Arg	Met	Val	Leu	Val
	275					280					285			
Val	Ala	Val	Phe	Ile	Val	Cys	Trp	Thr	Pro	Ile	His	Ile	Tyr	Val
	290				295					300				
Ile	Lys	Ala	Leu	Ile	Thr	Ile	Pro	Glu	Thr	Thr	Phe	Gln	Thr	Val
305				310					315					320
Trp	His	Phe	Cys	Ile	Ala	Leu	Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn
			325				330						335	
Val	Tyr	Ala	Phe	Leu	Asp	Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu
		340				345					350			
Cys	Ile	Pro	Thr	Ser	Ser	Thr	Ile	Glu	Gln	Gln	Asn	Ser	Ala	Arg
	355					360					365			
Arg	Gln	Asn	Thr	Arg	Asp	His	Pro	Ser	Thr	Ala	Asn	Thr	Val	Asp
	370				375					380				
Thr	Asn	His	Gln	Leu	Glu	Asn	Leu	Glu	Ala	Glu	Thr	Ala	Pro	Leu
385				390				395						400

<210> 87
 <211> 383
 <212> PRT
 <213> Homo sapiens

<400> 87

Met	Glu	Thr	Ser	Gly	Asn	Ile	Ser	Asp	Phe	Leu	Tyr	Pro	Leu	Ser	Asn
1				5					10					15	
Pro	Val	Met	Ser	Asn	Ser	Ser	Val	Leu	Cys	Arg	Asn	Phe	Ser	Asn	Ser
		20					25					30			
Thr	Ser	Phe	Leu	Asn	Met	Asn	Gly	Ser	Ser	Arg	Asp	Ser	Thr	Asp	Glu
	35					40					45				
Gln	Asp	Lys	Thr	Pro	Val	Ile	Ile	Ala	Ile	Ile	Ile	Thr	Thr	Leu	Tyr
	50				55					60					
Ser	Ile	Val	Cys	Val	Val	Gly	Leu	Val	Gly	Asn	Val	Leu	Val	Met	Tyr
65				70					75					80	
Val	Ile	Ile	Arg	Tyr	Thr	Lys	Met	Lys	Thr	Ala	Thr	Asn	Ile	Tyr	Ile
		85						90					95		
Phe	Asn	Leu	Ala	Leu	Ala	Asp	Ala	Leu	Ala	Thr	Ser	Thr	Leu	Pro	Phe
	100					105						110			
Gln	Ser	Val	Asn	Tyr	Leu	Met	Gly	Thr	Trp	Pro	Phe	Gly	Asp	Val	Val
	115					120					125				
Cys	Lys	Ile	Val	Met	Ser	Ile	Asp	Tyr	Tyr	Asn	Met	Phe	Thr	Ser	Ile
	130				135					140					
Phe	Thr	Leu	Thr	Thr	Met	Ser	Ile	Asp	Arg	Tyr	Ile	Ala	Val	Cys	His
145				150				155							160

Pro	Val	Lys	Ala	Leu	Asp	Phe	Arg	Thr	Pro	Arg	Asn	Ala	Lys	Ile	Val
				165					170					175	
Asn	Val	Cys	Asn	Trp	Ile	Leu	Ser	Ser	Ala	Ile	Gly	Leu	Pro	Val	Met
			180					185					190		
Val	Met	Ala	Ser	Thr	Thr	Ile	Glu	Asn	Gln	Asn	Ser	Pro	Leu	Gln	Val
		195					200					205			
Ser	Asn	Phe	Asp	Cys	Thr	Leu	Leu	Phe	Pro	His	Pro	Pro	Trp	Tyr	Trp
	210					215					220				
Glu	Thr	Leu	Leu	Lys	Ile	Cys	Val	Phe	Ile	Leu	Ala	Phe	Ile	Met	Pro
225				230						235				240	
Val	Leu	Ile	Ile	Thr	Val	Cys	Tyr	Gly	Leu	Met	Ile	Leu	Arg	Leu	Lys
				245					250					255	
Ser	Val	Arg	Met	Leu	Ser	Gly	Ser	Lys	Glu	Lys	Asp	Arg	Asn	Leu	Arg
			260					265					270		
Arg	Ile	Thr	Arg	Met	Val	Leu	Val	Val	Ala	Val	Phe	Ile	Ile	Cys	
		275					280					285			
Trp	Thr	Pro	Ile	His	Ile	Glu	Val	Ile	Ile	Lys	Ala	Leu	Val	Thr	Ile
	290					295					300				
Pro	Asn	Ser	Leu	Phe	Gln	Thr	Val	Thr	Trp	His	Phe	Cys	Ile	Ala	Leu
305					310					315					320
Gly	Tyr	Thr	Asn	Ser	Cys	Leu	Asn	Pro	Val	Leu	Tyr	Ala	Phe	Leu	Asp
			325					330						335	
Glu	Asn	Phe	Lys	Arg	Cys	Phe	Arg	Glu	Phe	Cys	Val	Pro	Ser	Pro	Ser
			340					345					350		
Val	Leu	Asp	Leu	Gln	Asn	Ser	Thr	Arg	Asn	Ser	Asn	Pro	Gln	Cys	Glu
		355					360					365			
Gly	Gln	Ser	Ser	Gly	His	Lys	Val	Asp	Arg	Asn	Asn	Arg	Gln	Val	
	370					375					380				